

AMENDMENTS TO THE CLAIMS

Following is a listing of the claims for this application. Additions are underlined and deletions are shown in strikethrough text.

1. (Currently amended) An interface between a driving member and a driven member, the interface comprising:

a the driving member having a polygonal length, said polygonal length having at least one surface selected from the group consisting of concave and convex surfaces; and

a the driven member having a matching polygonal length,
wherein a portion of one of the polygonal lengths is twisted along an axis of the length between two straight portions along the axis.

2. (Original) The interface of Claim 1 wherein the twist is from about $0^\circ 10'$ to about 1° .

3. (Previously presented) The interface of Claim 1 wherein the matching polygonal length is a shaft having a male polygonal length.

4. (Currently amended) The interface of Claim 1, wherein the two straight portions and twisted portion comprise a first twist in a first direction and a second twist further comprising a second twist along the axis of the length, said second twist in a direction opposite the first twisted portion.

5. (Original) The interface of Claim 1 wherein the driven member comprises a shaft having a male polygonal length with at least one portion of the length twisted from about $0^\circ 20'$ to about $0^\circ 50'$.

6. (Original) The interface of Claim 1 wherein one of the driving member and the driven member is straight.

7. (Original) The interface of Claim 1 wherein the polygonal length has a relative eccentricity of from about 1.5% to about 4%.

8. (Original) The interface of Claim 1 wherein the driven member comprises a shaft having a concave male polygonal length with a number of sides selected from the group consisting of 3 to 12.

9. (Previously presented) A method of interfacing a driving member with a driven member, the method comprising:

providing a driving member having a polygonal length and a driven member with a matching polygonal length, wherein one of the driving member and the driven member has a portion of the length twisted from about $0^{\circ} 10'$ to about 1° between two straight portions along an axis of the length; and

joining the driving member with the driven member.

10. (Original) The method of Claim 9 wherein the driven member comprises a shaft and the driven member comprises a flange.

11. (Original) The method of Claim 9 wherein the driven member comprises a shaft having a male polygonal length.

12. (Original) The method of Claim 9 wherein the driven member comprises a shaft having a male polygonal length with at least one portion of the length twisted from about $0^{\circ} 20'$ to about $0^{\circ} 50'$.

13. (Original) The method of Claim 9 wherein the driving member and the driven member comprise one of a group consisting of a compressor, a pump, a machine tool, a mechanical drive, a generator, and a motor.

14. (Previously presented) A coupling for an automotive drive shaft, the coupling comprising:

a shaft having a polygonal length, said polygonal length selected from the group consisting of concave, convex and straight surfaces; and

a mounting device having a matching polygonal length, wherein one of the mounting device and the shaft has a portion of the polygonal length twisted from about $0^\circ 10'$ to about 1° between two straight portions.

15. (Original) The coupling of Claim 14 wherein the mounting device comprises a flange.

16. (Currently amended) The coupling of Claim 14 wherein the polygonal length of the shaft comprises a male polygonal length with ~~at least a~~ the portion of the length twisted from about $0^\circ 20'$ to about $0^\circ 50'$.

17. (Original) The coupling of Claim 14 wherein the polygonal length has a relative eccentricity of from about 1.5% to about 4%.

18. (Original) The coupling of Claim 14, wherein one of the shaft and the mounting device are straight.

19. (Previously presented) The coupling of Claim 14 wherein the shaft has a concave male polygonal length with a number of sides selected from the group consisting of 3 to 12.

20. (Previously presented) A coupling for transmitting rotational energy from a driving member to a driven member, the coupling comprising:

a driving member having a polygonal length; and

a driven member having a matching polygonal length, wherein a portion of one of the members has a twist of from about $0^\circ 10'$ to about 1° between two straight portions.

21. (Original) The coupling of Claim 20 wherein the driving member is selected from the group consisting of an axle, a half axle and shaft.

22. (Previously presented) The coupling of Claim 20 wherein the matching polygonal length comprises a male polygonal length including a twist from about 0° 20' to about 0° 50'.

23. (Original) The coupling of Claim 20 wherein the polygonal length has a relative eccentricity of from about 1.5% to about 4%.

24. (Original) The coupling of Claim 20 wherein the driven member is a shaft having a concave male polygonal length with a number of sides selected from the group consisting of 3 to 12.

25. (Original) The coupling of Claim 20 wherein one of the members is straight.

26-29. (Cancelled)

30. (Currently amended) An interface between a driving member and a driven member, the interface comprising:

a the driving member having a polygonal length; and

a the driven member having a matching polygonal length,

wherein a portion of one of the polygonal lengths has a twisted portion between two straight portions along an axis of the length.

31. (Original) The interface of Claim 30 wherein the twist is from about 0° 10' to about 1°.

32. (Original) The interface of Claim 30 wherein at least one of the polygonal lengths has a relative eccentricity of from about 1.5% to about 4%.

33. (Original) The interface of Claim 30 wherein the driven member is a shaft having a male polygonal length with a number of sides selected from the group consisting of 3 to 12.